

ANALYST:		VPDES NO	
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Parameter: Ammonia Nitrogen

Method: Titrimetric

03/01

METHOD OF ANALYSIS:

	18th Edition of Standard Methods 4500NH ₃ -E
	EPA Methods For Chemical Analysis 350.2

		Y	N
1)	Is the titrimetric method used for samples with NH ₃ -N concentrations ranging from 5.0 mg/L to 25.0 mg/L? [SM-1; 350.2-1.2]		
2)	Are samples distilled unless there is data on hand to demonstrate that distillation is not necessary? [40 CFR]		
3)	Is ammonia free water used in all aspects of the procedure? [SM-3; 305.2-6.1]		
4)	Is a reagent blank titrated with each sample series? [SM-4.d; 350.2-7.4.1]		
5)	Is a buret with graduations of at least 0.1 mL used for the titration? [Permit]		
6)	Is indicating boric acid solution prepared and dated monthly? [SM-3.b; Permit]		
7)	Is 0.02N H ₂ SO ₄ titrant properly standardized against Na ₂ CO ₃ (standardization not required for titrant certified by manufacturer to be 0.02N)? [SM-3.c; 350.2-6.8]		
8)	Is titrant added until indicator turns pale lavender? [SM-4.c; 350.2-7.4.1]		
9)	Is sample size adjusted based on the ammonia nitrogen in the sample? [SM-1; Permit]		
10)	Is ammonia nitrogen calculated correctly? [SM-5; 305.2-8.1]		
	$\text{NH}_3\text{-N mg/L} = \frac{(A - B) \times 280}{\text{mL sample}}$ <p>Where: A = volume of titrant for sample (mL) B = volume of titrant for blank (mL)</p>		

PROBLEMS: